Fig. 4. Buliminus (Achutinelloides) hadibuensis, var. alba, p. 804.
5, 5 a. Buliminus (Achatinelloides) balfouri, n. sp., p. $80 t$.
6. Buliminus (Achatinelloides) tigris, n. sp., p. 805.
7. - (-) zebrimus, n. sp., p. 806.
8. - (-) longiformis, n. sp., p. 806.
9. - (—) semieastancus, n. sp., p. 807.
10. - (—) - var. alba, p. 807.
11. Ennca passamaana, Pctit, p. S08. $11 a$ and $11 b$, views of basal portion, from right side and below.
12. -balfouri, n. sp., p. 800. $12 a$ and $12 b$, right side of base, and as seen from below vertically to columella.
13. Pupe socotrana, n. sp., nat. size, p. 809.

## Plate LXIX.

Fig. 1. Stenogyra gollonsirensis, n. sp., nat. size, p. 809.
2, 2 a. Stenogyra fumifieata, n. sp., nat. size, p. 810.
3. Stenogyra jessiea, n. sp., p. 810 .
4. -adonensis, n. sp., p. 810. $4 a$, right side of base.
5. Stenogyra (Subulina?) enodis, n. sp., p. 811.
6. -_(Opeas?) hirsutus, n. sp., p. 811. (ia, epidermal hairs, magnified.
7, 7 a. Buliminus (Pachnodus) helieiformis, n. sp., p. 807.
8. Buliminus (Paehnodus) fragilis, n. sp., p. 808.
9. $\underset{\text { enlarged. }}{(-})$ adonensis, n. sp., p. S08. $9 a$, the columellar margin,
10. Buliminus (Aehatinelloides) gollonsirensis, n. sp., p. 805.
11. Notes on the Muscular Anatomy of Cercopithecus callitrichus. By G. E. Dobson, M.A., M.B., \&c.
[Received April 5, 1881.]
Having lately had occasion, while working at a question on general comparative anatomy, to dissect partially a fine male specimen of Cercopithecus callitrichus*, I offer the following notes, then made, to the Society for publication, as they contain some points of considerable morphological interest.

Anterior bellies of the digastrics greatly expanded and partially double, occupying the whole intermandibular space, but united by their fascial margins only, connected posteriorly by an aponeurotic expansion with the bolly of the hyoid bone, the greater cornu of which is also connected laterally by a tendinous band with the welldeveloped intermediate tendon above, and behind by a small tendon with the lower margin of the muscular fibres forming the posterior part of the muscle, which are inserted obliquely into the intermediate tendon, the infero-internal margin of which is seen to be directly

[^0]
$5 a$



continuous with the postero-internal margin of the anterior belly of the muscle ${ }^{1}$.

Sterno-mastoid mited above with cleido-mastoid ; cleido-occipital inserted close to, but not united with, trapezius ; omo-hyoid small, without tendinous intersection.

Trapezius inserted into the whole length of the spine of the scapula, also into the onter extremity of the clavicle. Pectoralis major arises from almost the whole length of the clavicle and from the sternum as far as the xiphoid cartilage. Pectoralis minor consists of two separate parts : the anterior, from the cartilages of the third to the sixth rib, is inserted into the capsular ligament of the shoulderjoint ; the posterior, from the aponeurosis of the external oblique, is inserted by an aponeurosis into the outer margin of the bicipital groove, being comnected with the insertion of the anterior part into the capsular ligament. These divisions do not touch each other, but pass separately and parallel to their insertions.

Levator claviculce double, from the atlas, forms two large muscles which are inserted, one behind the other, under cover of the trapezius, into the acromion and anterior third of the spine of the scapula; from the inferior margin of the anterior muscle a small slip of muscular fibres is detached and inserted into the outer extremity of the clavicle.

Levator anguli scapule and serratus magnus are so intimately conuected at their insertions, that it is difficult to say where the origin of one begins or the other ends. The former appears to be represented by two perfectly separate muscles, of which one arises from the transverse process of the athas, and is inserted into the posterior border of the scapula near its angle; the other, from the axis, is inserted immediately in front of the preceding; then follow two other muscular slips arising respectively from the third and fifth cervical vertebre, which are continuous at their insertions with the serratus magnus.

The three scaleni are well developed: the posterior is very large, and inserted by two divisions as far backwards as the fifth rib; the inferior division passing under cover of the extermal oblique to its insertion, the superior is inserted into, and becomes directly continuons with the fibres of that muscle, which may thus be said to extend from the neck to the pelvis.

Rectus abdominis et sternalis is very broad; its fibres end abruptly anteriorly along an oblique linc extending from the sternum behind the articulation of the fifth rib to the commencement of the osseous part of the third rib, where it is inserted into a fibrous aponeurosis, attached internally to the sternum and anteriorly to the first rib. From the outer margin of this aponeurosis (which equals the rectus in width, and looks like its continuation forwards, but its fibres are directed obliquely forwards and outwards) a thin flat muscle, the sterno-costalis, arises.

The deltoid is well developed; its inferior margin is connected
${ }^{2}$ See my paper, "On the Tendinous Intersection of the Digastric," Proo Roy. Soc. 31st March 1881.
with that of the pectoralis major; some of the fibres of its scapular portion are inserted into the superficial fascia of the arm. Rhomboideus consists of two parts of nearly equal extent: the first arises from the occipital bone under cover of part of the cleido-occipital and the trapezius, the second from the ligamentum muchæ (as far forwards as the second dorsal spine) and from two or three dorsal spines, and is inserted into the inner side of the posterior margin of the scapula external to the insertion of the occipital part.

Latissimus dorsi divides near the axilla into two parts; the smaller is united to and inserted with the teres major ; the other part, many times larger, after giving off the dorso-epitrochlearis, suddenly narrows into a small tendon which is inserted into the bicipital groove. The dorsn-epitrochlearis is enormous, covering the greater part of the posterior and inner side of the arm ; it is inserted by a tendinous expansion.

The coraco-brachialis is closely united with the short head of the biceps; it is inserted into the humerus above the middle; but a fasciculus of muscular fibres continuous with it passes on with the biceps, and is inserted with the latter into the radius. Covered by this muscle at its origin, a short but broad muscle, the coraco-brachialis brevis (rotator humeri, Wood) arises, and is inserted into the neck of the humerus below the lesser tuberosity.

The extensor ossis metacarpi pollicis is very large, and has but a single tendon, inserted into the proximal extremity of the first metacarpal bone.

Extensor secundi internodii pollicis is feeble, and has a single long tendon. Extensor communis digitorum sends three teudons to the three middle digits. Extensor minimi digiti forms two long tendons in the arm, which are inserted into the outer and inner sides of the fifth digit. Extensor indicis has also two tendons; one goes to the second digit, the other to the third, gives off also a tendon to the fourth digit. There is no trace of an extensor primi internodii pollicis.

Palmaris longus, arising with the flexor carpi radialis, is inserted as usual into the palmar fascia, from which a muscular bundle of fibres arises on the radial side, and is inserted into the integument of the palm; the corresponding integumentary muscle on the ulnar side is the palmaris brevis, which arises wholly from the pisiform bone and annular ligament.

Flexor digitorum profundus arises by three heads, which, however, are closely connected together, the only approximately distinct one being that arising from the outer side of the ulna, which gires origin to the tendon for the fifth digit. The tendon for the pollex arises from the superficial surface of the common tendon; it is very much smaller than the other tendons.

From the annular ligament near the insertion of the tendon of the flexor carpi radialis arises a small muscle, the fibres of which occupy a space scarcely exceeding that which would be taken by a split pea; this muscle forms a very slender tendon, which, passing superficially across the large abductor pollicis, gets to the ulnar
side of the tendon of the flexor profundus for the pollex, and is inserted into the base of the terminal phalanx of that digit. The $a b$ ductor, adductor, and opponens pollicis are well developed; the flexor pollicis brevis smaller, and quite concealed by the abductor pollicis. These last four muscles are quite distinct from the small muscle above described, which arises much higher up, and the tendon of which passes forwards superficial to all. It is difficult to trace the homology of this muscle, which corresponds in its insertion to that of the flexorpollicis longus of human anatomy, but differs altogether in its origin. Is it a separated part of the abductor pollicis or of the flexor pollicis brevis?
The abductor minimi digiti is very large, arising by two heads, one from the pisiform bone, the other from the annular ligament in common with the flexor minimi digiti; both unite to form a round tendon, which has the usual insertion. Flexor minimi digiti is also well developed, and larger than the flexor ossis metacarpi minimi digiti. The four lumbricales are well developed; they arise together from the palmar surface of the yet united four inner tendons of the flexor digitorum profundus.


Cercopithecus callitrichus.
Flexor muscles of right foot, ad. $\mathrm{o}^{\circ}$.
f.br. Flexor digitorum brevis; fl. acc. flexor accessorius; l,l,l. lumbricales; fl. long. dig. flexor longus digitorum (distr. to second and fifth toes); fl. long. hall. flexor longus hallucis (distr. to first, third, and fourth toes); $p l$. tendon of plantaris.

In the foot the flexor digitorum brevis tendon for the second digit arises from a bundle of muscular fibres laving their origin wholly from the expanded plantaris tendon; lower down it is joined by a few muscular fibres arising from the tendon of the flexor digitorum longus (fig. 1.), the other fexor brevis tendons having their origin from muscular fibres arising from the conjoined tendons of the flexor digitorum longus and fexor hallucis longus. The three lumbricales are well developed and have the same mode of origin in both feet, arising from the immer sides of the flexor tendons for the three outer tnes, into which they are inserted. The transversus pedis is present, but instead of arising, as in the human foot, from the extremity of the fifth metatarsal bone, arises from that of the second and by a fascial aponeurosis from the shaft of the third (fig. 2).

Fig. 2.


## Ccroopithecus callitrichus.

Adductor muscles and flexores breves vel interossei of right foot, imm. 와.
a. Adductor hallucis; $a^{\prime}$. adductor indicis; $a^{\prime \prime}$. adductor annularis; $a^{\prime \prime \prime}$. adductor minimi digiti; $i^{\prime \prime}, i^{\prime \prime \prime}, i^{i v}, i^{\top}$. plantar interossei (second to fifth toes); t.p. transversus pedis ; fl.h. tendon of flexor longus hallucis.

The adductors of the second, fourth, and fifth digits arise together in close comnection, partially under cover of the origin of the adductor hallucis; that for the second digit is much smaller than the others. The plantar flexores breves vel interossei are well developed, a pair for each digit inserted into the sides of the base of each first phalanx; the innermost of the pair for the middle digit is strengthened by receiving near its insertion an additional strong muscular fasciculus arising from the scaphoid bone.

The specimen from which the above notes have been taken, was sent from Barbadoes (into which island it was no doubt imported from the west coast of Africa), and corresponds in all respects to specimens in the British Museum labelled "Cercopithecus sabceus;" but this name is restricted by Scllegel ${ }^{1}$ to a closely allied species from Eastern Africa. In the 'Proceedings' of this Society for Jan. 1865, pp. 43-46, Mr. Mivart has published 'Notes on the Myology of a specimen of Cercopithecus sabreus;" but my specimen (if belonging to the same species) presents many important differences in its anatomy, which may be briefly exhibited as follows :-

[^1]
## C. callitrichus (Dobson).

1. Omo-hyoid present.
2. Trapezius partially inserted iuto the chavicle.
3. Pectoralis major arose from almost the whole length of the clavicle.
t. Pectoralis minor consisted of two very distinct portions, one of which was inserted into the capsular ligament, the other into the edge of the bicipital groare.
4. Levator claviculce partially inserted into the clavicle.
5. Extensor ossis metacarpi pollicis had but a single tendon.
6. Extensor indicis gave off (in addition to those for the second and third digits) a tendon for the fourth digit also.
7. Lumbricalcs had similar origins in both feet.
8. Plantar interossei inserted by pairs into the sides of the proximal extremities of the phalangeal bones.

## C. sabcues (Mivart).

1. No omo-hyoid.
2. Traperius had no iusertion into the elaricle.
3. Pectoralis major without the clat vicular origin.
4. Pcctoralis minor consisted of two very distinct portions, which were together inserted into the capsular ligament.
5. Levator clavicula not at all inserted into the claricle.
6. Extensor ossis metacarpi pollicis gave rise to tro tendons.
7. Extensor indicis gave off tendons to the second and third digits only.
8. Lumbricales had different origins in both feet.
9. Plantar interossei inserter like the palmar interossei of tho human hand.

Other less important differences might also be noted in the connections of other muscles as described; but these might be fonnd between any two specimens of the same species. If Mr. Mivart's specimen really belonged to the same species as mine does, the muscular differences above noted are exceedingly remarkable.

Since writing the above, I have been enabled, through the kindness of Mr. W. A. Forbes, Prosector to the Society, to dissect another specimen of this species, a young female which had lately died in the Society's Gardens. The general conformity in its muscular structure with that of the robust male above-described was remarkable, the slight differences observable being almost confined to the extremities. The omo-kyoid was even better developed, and was united, at about an inch from its insertion, with the outer margin of the sterno-hyoid; the trapezius had not only a clavicular insertion but occupied fully oue third of that bone; although the levator clavicula arose by a single head from the atlas, it soon divided into two large muscles as above described. In the right forearm a remarkable individual peculiarity was found: the tendon of the extensor secundi internodii pollicis ended abruptly above the carpus by being inserted into the interosseous ligament, and the tendon for the pollex was derived from the extensor indicis, which, as in Mr. Mivart's specinen, sent a tendun to the third but none to the fourth digit. The small anomalous muscle described abore as arising from the annular ligament near the insertion of the tendon of the flewor. carpi radialis, and inserted into the terminal phalans of the pollex was not found. In the foot the only differences noticeable were found in the short flexor tendon for the second digit, which was not connected by muscular fibres with the tendon of the fexor digitorum longus, and in the presence of a separate muscular slip which arose Proc. Zool. Soc.-1881, No. LIII.
with the transversus pedis from the extremity of the second metatarsal bone, and became united with the fibres of the adductor hellucis (fig. 2).

November 15, 1881.
Prof. Flower, LL.D., F.R.S., President, in the Chair.
The Secretary read the following reports on the additions made to the Society's Menagerie during the months of June, July, August, September, and October, 1881:-

The total number of registered additions to the Society's Menagerie during the month of June was 153 , of which 46 were by hirth, 69 by presentation, 31 by purchase, and 7 were received on deposit. The total number of departures during the same period by death and removals was 120.

The registered additions to the Society's Menagerie during the month of July were 94 in number; of these 31 were acquired by presentation, 20 by purchase, 14 by exchange, 18 by birth, and 11 were received on deposit. The total number of departures during the same period by death and removals was 97 .

The most noticeable additions during the month were:-

1. Eight Menobranchs (Menobranchus lateralis) from North America, examples of this singular Amphibian with external gills not having been previonsly received.
2. A Surucncu Snake (Lachesis mutus) from Pernambuco, Brazil, presented by C. A. Craven, Esq., July 27 th.

This deadly Serpent forms a new and most interesting addition to the series of Venomous Snakes in the Snake-house.

The total number of registered additions to the Society's Manegerie during the month of August was 111; of these 66 were acquised by presentation, 30 by purchase, 3 by birth, 10 were received on deposit, and 2 in exchange. The total number of departures during the same period by death and removals was $i 2$.

The total number of registered additions to the Scciety's Menagerie during the month of September was 112; of these 53 were acquired by presentation, 38 by purchase, 4 were bred in the Gardens, and 17 were received on deposit. The total number of departures during the same period by deth and removals was 68 .

The most interesting acquisition of the month was a specimen of the Rubiginous Cat (Felis rubiginosa) from Ceylon, presented by Charles E. Pole Carew, the species being new to the Society's collection.

The total number of registered additions to the Society's Menagerie during the month of October was 114 , of which 4 were by birth, 71 by presentation, 27 by purchase, and 12 on deposit. The total number of departures during the same period by death and removals was 101 .

The most noticeable additions during the month were :-

1. An example of the little-known Bornean Carnivore Hemigalea hardwickii ${ }^{1}$, new to the Society's collection. The specimen measures about 2 feet long in the body, the tail 18 inches. It is very shy and fierce, and nocturnal in its habits. When handled it ejects a highly acrid and skunk-like secretion from its anal glands.
2. Two female Beatrix Antelopes (Oryx beatrix), obtained from the great desert behind the momntainous district of Oman, Muscat, by Lieut.-Col. S. B. Miles, British Consul at Muscat, and presented to the Society by Lord Lilford, F.Z.S.

This rare Antelope has, so far as I know, been only three times previonsly bronglit alive to this country. (Cf. P. Z. S. 1872, p. 603, and 1878, p. 789 .) One of the present examples is in good condition; the other is unfortunately much injured about the head.

The following Reports on the Insect-honse, by Mr. W. Watkins, were also read:-

## Report of the Insect-house for July 1881.

Cage No. 1. This cage has been tenanted with cocoons of Samia gloveri; two cocoons still appear likely to emerge.

No. 2. Samia cecropia.-The eggs obtained from this species, like the preceding, hatched; and the larvæ fed rapidly, attaining over an inch in length ; but in three days the whole brood died, being attacked with diarrhoea. An entomological friend of mine had a large number of imported cocoons from the same source as those belonging to the Society; and the progeny, to the number of some thirteen hundred, all died soon after moulting for the first time, from the same cause, which I attribute to degeneration, the cocoons imported having been obtained in confinement. A further small supply of larve vas obtained from Madame Simon of Brussels ; and these larve are doing quite well at present, only one having died, and that from some injury received en route. No further imagos have emerged during July; the case, however, has been kept furnished with cocoons until larvee are of sufficient size to transfer to it from bell-glasses.

No. 3. Attacus cynthia.-Imagos of this species emerged at intervals during the greater part of the month, and eggs for succession were obtained; these have hatched and are feeding inside a muslin bag: attached to a lilac tree near the Insect-house, and growing slowly, as desired, for late exlibition. Another and earlier brood are exhibited
${ }^{1}$ Viverra hardwichii, Gray, Spicil. Zool. ii. p. 9 (1830); Viverra boici, Müll. \& Schl. Verh. Zool. p. 120, t. 18 ; Hemigalea hardwichii, Gray, P. Z. S. 186t, p. $5 \geq \pm$.
in the case, aud are now a nice size, doing quite well ; they will probably spin during August.

No. 4. Attacis pernyi.-The eggs obtained of this hardy species hatched and fed up well, and a fine group of larve were exhibited throughout the month ; there are now about 40 full-sized cocoons in the case, which will produce imagos during August for second brood. This species thriving well upon evergreen oak, can be fed far into the autumn.

No. 5. Attacus atlus.-Imagos of this species were exhibited alive in the case thronghout the month. A fine group of 11 perfect insects emerged on Sunday, 24th instant. This is an extremely difficult species to induce to copulate. I have tried honey sponge and other methods unavailingly, so that only about 10 per cent. of the imagos lave copulated, which, however, have given a nice lot of eggs.

The first brood of larve died after first monlting. The second brood, hatched June 20, have done very well, and have been exclusively fed upon a shrub (evergreen) common in the gardens; so that this, like the preceding species, cau be fed into the late autumn.

No. 6. Attacus mylitta.-Fine imagos of this species appeared on the $3 \mathrm{rd}, 10 \mathrm{th}, 12$ th, 20 th, and 24 th, unfortunately at too wide intervals to obtain eggs. There appear to be ten more cocoons still likely to emerge.
[The insect bred on the 3rd unfortunately escaped, flying with great rapidity out of the cage when it was opened, and through the narrow window at the end out into the open. A good search was made ; but it was not found. Some very fine specimens of unusually bright colour have been preservel.]

No. 7. Actics selene.-Perfect specimens appeared on the 7 th , 10 th, and 23 rd instant, and, being in very fine condition, were preserved. Unless the sexes emerge same day, there is little likelihood of procuring fertile eggs ; and the species will not retain its beauty after one might; invariably on the following morning the insect is in a very battered condition.

No. 8. Actias luna.-One specimen of this species emerged on the 6th instant ; there appear to be others yet likely to come out.

No. 9. Telea promethea.-Small larvee of this specics have been exhibited from eggs obtained in June; but the little brood of 17 larve died on the 10th instant. I hope for more later on.

No. 10. Antherca yama-mai.-A fine female of this species emerged on the 22nd instant from eggs hatched April 16 th, being 3 months and 6 days reaching maturity. I expect others to emerge, and so to get second brood.

No. 11. Hybrids between Attacus pernyi and Attacus roylei.Five larree, reputed to be these, were kindly deposited by Lord Walsingham on the 4th instant. One died the following day; three lave formed cocoons; and the fifth is still feeding, but growing very slowly, if at all. I have been unable to detect any difference between these larve and those of Attacus pernyi.

No. 12. Aglia tau.-Five fine larve of this species were deposited
by Lord Walsingham on the 4th instant. Four have spme up in the moss and, I hope, changed to pupæ; but it is best not to disturb them at present. One has died. This cage now contains the larve of Attacus atlas.

No. 13. Papilio machaon.-Small larve were obtained from the Cambridge fens on the first day of the month and placed in the cage. They grew rapidly, feeding upon carrot-top, and spun up in 10 days; they are now (August) emerging perfect and of full size. This is the second brood of this species. All the pupe obtained changed on the top of the cage, and were not, as usual, of a pale yellow-green deepening to a fine dark green along the back, but were dirty white, changing to a dark amber-colour along the back. I have seen pupe of this species of the same colour from Germany and France (reared in confinement), but only very rarely in England.

No. 14. Deilephila euphorbia.-Pupre of this species emerged during the month in fine condition; and the imagos were much admired. Two of these were observed hovering over the flowers in a most natural manner.

No. 15. Erebia medea.-The larva of this species placed in the cage in June produced fine imagos almost every day during Jnly.

No. 16. Lycrena corydon.-Larve of this pretty little Butterfly were obtained from Canterbury and fed up, changing to healthy pupe, and producing many imagos daring the early part of the month. The cage is now tenanted with Smerinthus ocellatus.

No. 17. Polyommatus phleas.-Larre of this little Butterfly were obtained and placed in the cage, and fed upon Rumex; they produced perfect specimens about the midlle of the month for some days. After this species was over, the cage was stocked with Sphinu ligustri.

No. 18. Saturniu carpini-Larre obtained from eggs spun up on the 17th instant; a further supply of larve which was obtained produced cocoons about the same time, a niee lot of which are reserved for next spring.

No. 19. Vanessa antiopu.-Larve of various growths and pupa of this species were obtained from Germany ; and imagos appeared from the 21 st instant, the three stages being exhibited alive. The imagos feasted upon over-ripe plums placed in the cage for them.

No. 20. Zygena filipendula.-Larve and pupe of this species were obtained from the South coast, and the imagos emerging in a few days made a rery pretty exhibition during most of the month in this cage.

No. 21. Checrocampu elpenor--A full-fed larra of this species was presented by Mrs. Frances Smith on the 16 th instant, having been found in her garden derouring the fuchsias; it spun up under the moss the following day. A further supply of the larver was obtained a few days later ; some of them have spun up; others are still feeding upon Virginian Creeper, an excellent substitute for Galium, their usual food-plaut.

No. 22. Lasiocampa quercifolia.-Imagos of this species have been exhibited throughout the month ; many fertile egge were also
obtained, some of which have hatched, and are kept in the studio in a proper vessel for hibernation. An experiment is being tried with some few of these larve in order to force them to become imagos before winter; they are growing slowly at present.

No. 23. Cerura vinula.-A nice lot of small larro of this species was presented by Mrs. Blandford. A part of these placed at once in this cage fed up quickly, and are now in cocoons, having spun up in a piece of cork placed in the cage for them; the other half are now in the cage as larre of different growths.

No. 24. Cossus ligniperda.-Almost every day a larva of this species has come out of the piece of willow exhibited in the cage ; after crawling about, it has reentered the branch. There are two growths in the wood-those of last year's hatching and of the previous year.

No. 25. Lasiocampa quercus.-Larve of this species have been exhibited, but at present no cocoons formed; it is a difficult larva to breed.

No. 26. Orgyia antiqua.-A plentiful supply of the larre of this abundant species has been obtained from the gardens; and when a female has freshly emerged in this cage, it has attracted from the outside a number of males. One morning the cage was quite beset with those amorons little creatures, which refused to be driven away, and could easily be picked up by the fingers; at other times this is not an easy species to capture.
In the small cages at the cnd of the house, and on the tables, have been exhibited in succession such insects as appear at this season.

Pupæ of Lithosia quadra were obtained from the New Forest, but a small percentage of imagos appeared, the majority being infested with Iclineumon flies.

Liparis monacha, also received from the same locality in the same condition. Larvo of Biston hirtaria, Acronycta psi and A. megacephala, and other common species occurring about London, have been gathered and exhibited; also larvo of the Ladybirds (Coccinellidos), Lacewing flies (Hemerobiide), the larve of which are named Aphislions, from feeding upon Aphides.

Perfect specimens of the Ant-lions (Myrmeleon) commenced to emerge this month, and some fine ones have been preserved.
Selenia illustraria.-Some eggs of this pretty species were presented to the Society during the month by Miss Golding Bird, and hatched the following day, the 20 th instant. A part of these are now exhibited in a tube; the others are retained for future exhibition.

Heteroyynis pennella.-These little larvæ, presented by Lord Walsingham, grew to about lalf size and died; their proper food may perhaps be obtained in a future season.

Orgyia, sp. inc.-Lord Walsingham deposited two larve of an unnamed Orgyia from North America. I was able to breed a fine specimen on the 26 th instant, which has been preserved.

Some mangolds infested with the larva of the Dipteron Anthomyia betee were sent in reply to a request of mine, and exhibited with a short notice.

Aretia parasita.-Larve of this species were deposited by Lord Walsingham, and all are now in pupa, kept in the cool studio.

General Remarks.-During the past month I have communicated with many entomologists throughout the world; and I hope by this means that the Society will iu due course receive many nice specimens from abroad for the Insect-house. A correspondent in Rio (Mr. Bonninghausen) has already expressed his willingness to assist, and is for that purpose feeding up Attacus auratus aud other Saturniidæ for exhibition later on. I have also asked for cocoons of the giant Cetonias Goliathus torquatus isc., from a correspondent, Mr. Fuller, of Camaroons, West Africa.

## Report of the Insect-house from August 1si to September 17th, 1881.

Case No. 1. Samia gloveri.-No alteration has occurred in this pase since preceding report.

No. 2. Sumia cecropia.-The lavre of this species have not done well in the house-those obtained from Brussels growing very slowly, and diminishing by death till the last one died Sept. 8, having only attaiued about half-growth.

No. 3. Attacus cynthia.-Four cocoons were obtained from the larvæ hatched in July; and a perfect insect appeared from one of these on Sept. 4. A nice lot of the larvæ, nearly full fect, are now in the cage.

No. 4. Attacus pernyi.-The cocoons obtained in July produced fair-sized imagos for the summer brood; and throughout August living moths were exhibited. A very large number of eggs were obtained. These hatched on Angust 29 ; and there are now in this case and in glass ressels about 300 larrec feeding up; these will continue feeding into November.

No. 5. Attacus atlas.-Imagos were exhibited alive throughout the month of August. I obtained four fair-sized cocoons from the larvæ reported on last month ; and these, I anticipate, will emerge in October. These are now exhibited.

No. 6. Attacus mylitta.-The sexes of this species not emerging together, no fertile eggs were obtained from our stock. I procured a few eggs from a correspondent ; but these were not fertile ; so I procured 50 small larvx, which are now feeding nicely, and will, Ihope, produce cocoons, although started so late ; however, they feed nicely upon the evergreeu oak, which can be procured as long as required.

No. 7. Actics selene.-No change has taken place in this case since my last Report.

No. $\dot{8}$. Actias luna. - The same remark applies to this case as to no. 7 ; as, however, both hold cocoons that appear alive, they hal best be retained as they are.

No. 9. Telea promethea.-No change has been made in this case.
No. 10. Anthercea yama-mai.- No more cocoons have emerged.
No. 11. Attacus auratus.-My friend, Mr. Bominghauscin, of Rio, has seut me 8 cocoons of this fine species (hitherto not recorded as bred in this country) by post; on arrival 5 were found


[^0]:    * The following are the measurements of this specimen :-Length of head and body (along back) $3^{\prime} 7^{\prime \prime} \cdot 25$; tail $2^{\prime} 1^{\prime \prime} \cdot 25$; ear $1^{\prime \prime} \cdot 2 \times 1^{\prime \prime}$; elbow to end of middle finger $9^{\prime \prime}$, knee to end of middle toe $11^{\prime \prime} \cdot 75$, manus $3^{\prime \prime} \cdot 4$, pollex $1^{\prime \prime} \cdot 5$, middle cligit $1^{\prime \prime} \cdot 5$, pes $5^{\prime \prime} \cdot 3$, hallux $1^{\prime \prime} \cdot 2$, micldle digit $2^{\prime \prime}$.

[^1]:    ${ }^{1}$ Monographie des Singes, 1876, p. 75.

